Title (en)

Process for preparing Si-H containing chlorosilanes

Title (de)

Verfahren zur Herstellung von SiH-haltigen Organylchlorsilanen

Title (fr)

Procédé de préparation de chlorosilan contenant Si-H

Publication

EP 0776698 A1 19970604 (DE)

Application

EP 96119065 A 19961128

Priority

DE 19544730 A 19951130

Abstract (en)

Preparation of organosilanes of formula (I) and/or (IA) is claimed by reaction of a chlorosilane (II) with a methylhydrogensilane (III) in the presence of a phosphonium catalyst (IV). In the formulae: R = alkyl, aryl, alkaryl or haloalkyl; X = halogen; a, b, y and z = 1 or 2; and c = 2 or 3. Also claimed is a novel catalyst (IV) and its preparation by reacting a phosphonium compound of formula R<1>mP<+>R<2>4-m-SiYpR<3>3-pX<-> (V) in a solvent with a carrier. In the formulae: R<1> = 1-20C monovalent hydrocarbon or 2 R together form a 4-11C divalent hydrocarbon opt. interrupted by a heteroatom; R<2> = mono- or di-valent 1-20C hydrocarbon; m = 1, 2 or 3 (=3 in compound (V) used in the catalyst preparation); n = 0 or 1, with m = 3 when n = 1; T = an oxygen-bonded carrier; R<3> = 1-12C monovalent hydrocarbon; p = 1, 2 or 3; and Y = a hydrolysable group. ZRaSiCl4-a (II) + CH3SiHcX3-c (III) -> ZRaSiHbCl4-a-b (I) + CH3SiHc-yX3+y-c (IA) The reaction proceeds under the action of a catalyst given by (IV). (R<1>mP<+>R<2>4-m)ÄSi(OT)pR<3>3-pÜX<-> (IV)

Abstract (de)

Die Erfindung betrifft ein Verfahren zur Herstellung von Organylsilanen, die zumindest einen Si-gebundenen Wasserstoff aufweisen, in der Gegenwart eines Phosphoniumkatalysators, den Phosphoniumkatalysator selbst sowie ein Verfahren zu seiner Herstellung.

IPC 1-7

B01J 31/02; C07F 7/12

IPC 8 full level

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B01J 31/0268 (2013.01 - EP US); **B01J 31/0269** (2013.01 - EP US); **B01J 31/0274** (2013.01 - EP US); **B01J 31/0275** (2013.01 - EP US); **C07F 7/123** (2013.01 - EP US); B01J 21/08 (2013.01 - EP US)

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